

PATENT
Docket No. 12584.37
Customer No. 000027683

II. AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A downhole tool for attachment in a production string in a well bore having a casing comprising:

a tubular housing having a first fluid passage and a longitudinal axis;
a first movable sleeve seal coupled to an exterior of the housing, the first movable sleeve seal adapted to substantially block a flow of fluid through the first fluid passage when the first movable sleeve seal is in a closed position and to allow the flow of fluid when the first movable sleeve seal is in an open position,
an actuating device comprising a plurality of scissor arms coupled to the first movable sleeve seal and comprising a plurality of scissor arms such that in response to a first predetermined condition, the scissor arms move laterally causing the first movable sleeve seal to move longitudinally from the closed position to the open position, and
a valve in communication with the first fluid passage, such that upon a second predetermined condition the valve allows the flow of fluid through a second fluid passage.

2. (Original) The downhole tool of claim 1 wherein the first fluid passage comprises a longitudinal fluid passage and at least one fluid exit port.

3. (Currently Amended) The downhole tool of claim 2 wherein the first movable sleeve is ~~seal comprises a hollow cylindrical sleeve disposed longitudinally around the first fluid passage~~ adapted to slidably move between the closed position and the open position, wherein in the closed position the first movable sleeve covers the at least one fluid exit port.

4. (Currently Amended) The downhole tool of claim 1 wherein the actuating device further comprises:

a second movable sleeve,

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wherein the second movable sleeve is coupled to an exterior of the housing, the first movable seal sleeve and the wherein said plurality of scissor arms are coupled to the movable sleeve.

5. (Currently Amended) The downhole tool of claim 4 further comprising an anchor, wherein the anchor is coupled to the housing, the second movable sleeve and the plurality of scissor arms, and wherein the anchor allows to allow the second movable sleeve to move relative to the housing.

6. (Currently Amended) The downhole tool of claim 4 further comprising a plurality of connecting rods coupling the first movable sleeve to the second movable sleeve seal such that when the second movable sleeve moves, the first movable sleeve seal moves.

7. (Currently Amended) The downhole tool of claim 1 wherein the valve comprises:
an entrance port of the second fluid passage passageway,
a ball,
a biasing mechanism positioned to exert a biasing force upon the ball to normally maintain the ball against the entrance port such that fluid flow is prevented from entering the second fluid passage passageway.

8. (Currently Amended) The downhole tool of claim 1 wherein the valve comprises:
an entrance port of the second fluid passage passageway,
a plunger,
a biasing mechanism positioned to exert a biasing force upon the plunger to normally maintain the plunger against the entrance port such that fluid flow is prevented from entering the second fluid passage passageway.

9. (Original) The downhole tool of claim 1, further comprising a guide mounted to the body to assist in centralizing it in the casing and to protect the tool as it is inserted into the casing.

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10. (Currently Amended) A fill tool for a casing, the fill tool comprising:
a body having an internal passage leading to at least one outlet port adjacent a lower end of the said body;
~~a movable seal mounted externally to the body;~~
an actuator comprising a plurality of scissor arms positioned about the body and adapted to laterally collapse upon insertion into the casing; and
~~a valve coupled to the movable sleeve seal and positioned external to the internal passage, the valve movable sleeve being movable between an open position and a closed position with respect to the at least one outlet port in response to the lateral movement of the said actuator upon insertion into and substantial removal of the body from the casing.~~
11. (Currently Amended) The fill tool of claim 10, further comprising a second movable sleeve coupled to the first movable sleeve seal and the scissor arms such that when the scissor arms move laterally, the first movable sleeve and the second movable sleeve seal move longitudinally.
12. (Currently Amended) The fill tool of claim 11 further comprising an anchor, wherein the anchor is coupled to the housing, the second movable sleeve and the plurality of scissor arms, and wherein the anchor allows to allow the second movable sleeve to move relative to the housing.
13. (Original) The fill tool of claim 10, further comprising:
a guide mounted to the body to assist in centralizing it in the casing and to protect the tool as it is inserted into the casing.
14. (Currently Amended) The fill tool of claim 10, further comprising a valve in communication with the internal passage, such that when the movable sleeve is in a closed position with respect to the at least one outlet port and upon a predetermined condition, the valve is adapted to allow the flow of fluid through a second fluid passage other than the at least one outlet port.

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15. (Currently Amended) A method for filling a well casing, the method comprising:
coupling a fill tool to a lower end of a tool string tubing, the fill tool having: a first fluid passage; a movable sleeve valve in communication with the first fluid passage and positioned in a closed configuration about an exterior of the tool so as to block the flow of fluid through the first fluid passage; and an actuating device comprising a plurality of scissor arms coupled to the movable sleeve valve,

lowering the tool into an the opening of a well casing to actuate the actuating device by laterally collapsing the scissor arms thereby moving the movable sleeve valve to an open position so as to allow the flow of fluid through the first fluid passage, and

injecting fluid into the tool string tubing such that the fluid flows through the fluid passage and the valve.

16. (Currently Amended) The method of claim 15 further comprising:
raising the tool from the well casing to actuate the actuating device by laterally expanding the scissor arms thereby moving the movable sleeve to a closed position so as to block the flow of fluid through the first fluid passage, and
closing the valve to retain the fluid.

17. (Currently Amended) The method of claim 16 wherein the fill tool has further providing a second valve such that when the movable sleeve is in a closed position and blocking the flow of fluid through the first fluid passage, upon a second predetermined condition the second valve allows the flow of fluid through a second fluid passage.